DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014016 Address: 333 Burma Road **Date Inspected:** 18-Apr-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Li Jia. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

Outside yard:

CB10, CB11, CB12, CB13, CB14 & CB16:

This QA Inspector observed that no significant work was being performed on the above mentioned CB's at the time when this QA was present.

CB9:

Notification No: 005536.

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector has generated MT report for this date. The member(s) are identified as OBG components. The weld designations reviewed are as follows:

- 1) CB202A-009 014.
- 2) CB202G-021 063, 064, 067 to 070, 139, 157, 141, 159, 003 to 006 & 149 to 152.

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- 3) CB202G-022 063, 064, 067 to 070, 139, 157, 141, 159, 003 to 006 & 149 to 152.
- 4) CB202G-023 063, 064, 067 to 070, 139, 157, 141, 159, 003 to 006 & 149 to 152.
- 5) CB202G-024 063, 064, 067 to 070, 139, 157, 141, 159, 003 to 006 & 149 to 152.
- 6) FB205-021 10 & 11.
- 7) FB205-022 10 & 11.
- 8) FB205-023 10 & 11.
- 9) FB205-024 10 & 11.
- 10) SP206A-009 009 to 013.

This QA Inspector observed the following work in progress for CB9:

Repair welding of weld joint nos: CB202A-009 – 002. Welder was identified as 066261. Welding process was identified as SMAW. ZPMC Quality Control (QC) is identified as Liu Chen Guang. The welding variables recorded by QC appeared to comply with the WPS: WPS-345-SMAW-2G(2F)-repair (as per CWR No: B-CWR1380 Rev-2 Dt: 04/17/10).

Repair welding of weld joint nos: CB202A-009 – 014. Welder was identified as 066261. Welding process was identified as SMAW. ZPMC Quality Control (QC) is identified as Liu Chen Guang. The welding variables recorded by QC appeared to comply with the WPS: WPS-345-SMAW-2G(2F)-repair (as per CWR No: B-CWR1380 Rev-2 Dt: 04/17/10).

This QA Inspector also observed ZPMC personnel doing heat straightening of bottom panel BP204A (for CB9). Material is identified as Seismic Performance Critical Member (SPCM), 12 mm thickness. ZPMC QC was identified as Liu Chen Guang. Heat straightening was done according to HSR1(B)-8382 Rev-0. Heat straightening was needed to be done to rectify the distortion of 12mm for 11m (on BP204A). Refer attached photos for reference.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar, Sailesh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer